



The Name Game

Latin Binomials and What They Mean

Do long, hard-to-pronounce, foreign-sounding, scientific plant names intimidate you? Here is a primer on how to understand (and perhaps master) those funny sounding Latin names.

**Story and Photography By
Douglas A. Spilker, Ph.D.**

The genus *Lobelia* is named after Mathias de l'Obel, a French physician and botanist credited with the first attempt to classify plants according to their natural similarities, rather than their medicinal uses.

When I was in high school we had to choose a language course to take. The only options were Spanish or Latin. Everyone said don't take Latin, it's a dead language, and all you do is read. The shy introvert in me wouldn't be caught dead trying to speak Spanish in front of my merciless classmates. So Latin it was, reading the "War Commentaries of Caesar." Little did I know that being somewhat proficient in Latin — at least remembering some of the vocabulary — would enhance my knowledge of the plant world!

Have you ever wondered how plants got their names? Most of us are not comfortable with Latin, have difficulty remembering and pronouncing it, and refer to our plants by their common

names. The use of common names is simpler but it can lead to all sorts of confusion. Common names are often "common" only to local or regional areas. For example, bloodroot (*Sanguinaria canadensis*), a common spring flower, is also known as puccoon or red puccoon, Indian paint, redroot, Pauson and tetterwort, and the roadside weed Queen Anne's lace (*Daucus carota*) may be called wild carrot, bird's nest and bishop's lace depending on the country.

Sometimes the same "common name" is used in different regions to identify a completely different plant. For instance, have you ever gone to a garden center and asked for periwinkle plants? You may have gotten the sun-loving, "pink-eyed" annual Madagascar periwinkle (*Catharanthus*

roseus) or the common periwinkle (*Vinca minor*), a shade-loving blue-flowered ground cover. There is quite a difference between the two in growth habit and ideal habitat.

Common names also do not provide information on plant family relationships. In fact, some common names suggest erroneous relationships between plants. Cedar is a commonly used plant name, but only one of the following plants is a true cedar (genus *Cedrus*): Port-Orford cedar (*Chamaecyparis lawsoniana*), western red cedar (*Thuja plicata*), eastern red cedar (*Juniperus virginiana*) and cedar of Lebanon (*Cedrus libani*). There will always be a place for common names, since they are both colorful and familiar, but they are not universal.

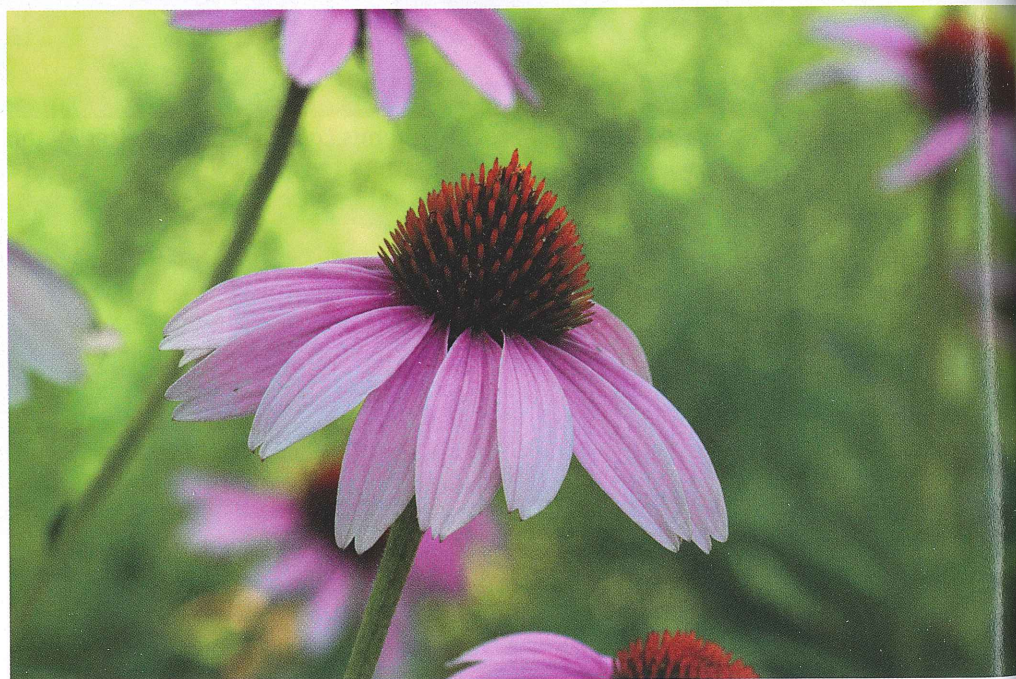
It's All Greek To Me

Many times plant labels and catalogs have the Latin names. You do not need to know Latin names to enjoy plants, but when trying to identify a species, an understanding of the Latin binomial (two-name) system can be useful. This nomenclature provides a common language for gardeners and scientists all over the world so they know what plant you are talking about.

The term "nomenclature" just means the act of calling by name. Most scientific names come from Latin (hence the term Latin binomial), which was the scientific language of the day, but others may be from Greek. In 1753, Carl von Linne (who later Latinized his name to Carlos Linnaeus), a Swedish botanist, was the first to impose the two-part names to thousands of plants. He identified a natural order of plants and grouped them according to structural similarities such as flowers, leaves and fruit. However, Linnaeus understood that although some names describe, all they really need to do was to specifically label the plant. Quite literally, each species is identified by a combination of "two names" — its genus name and its specific epithet.

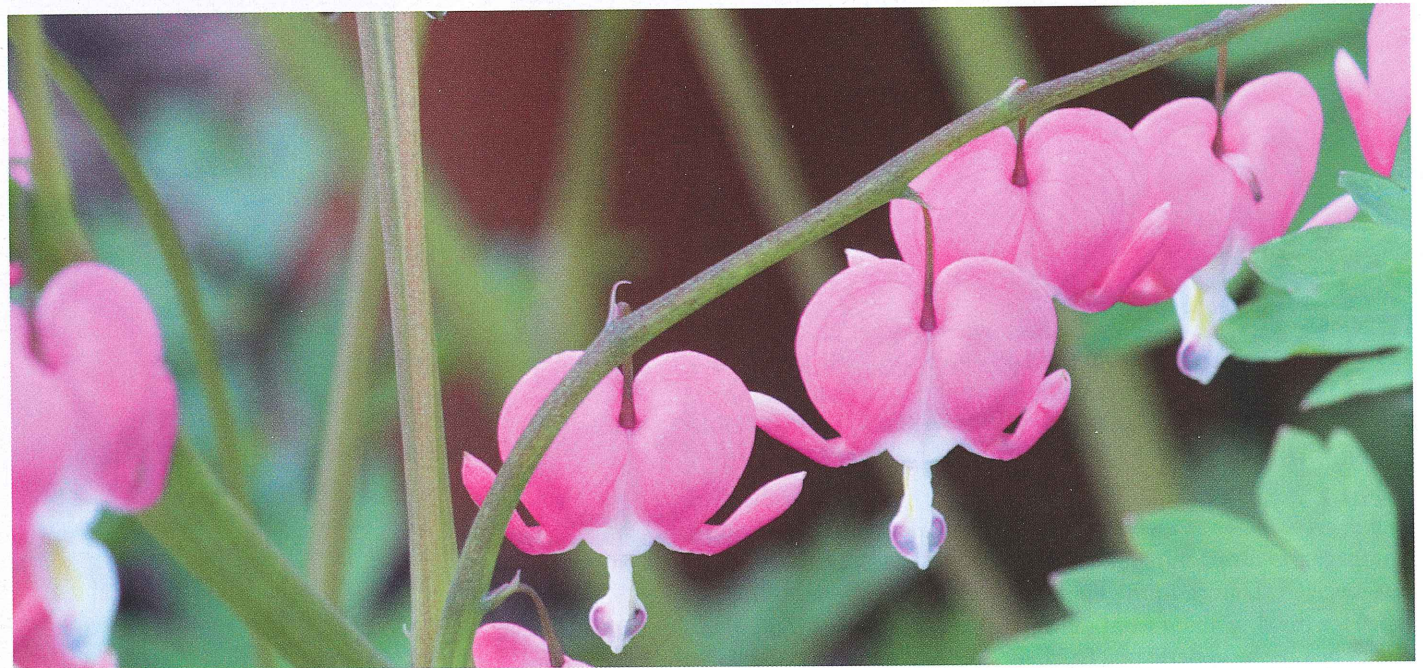
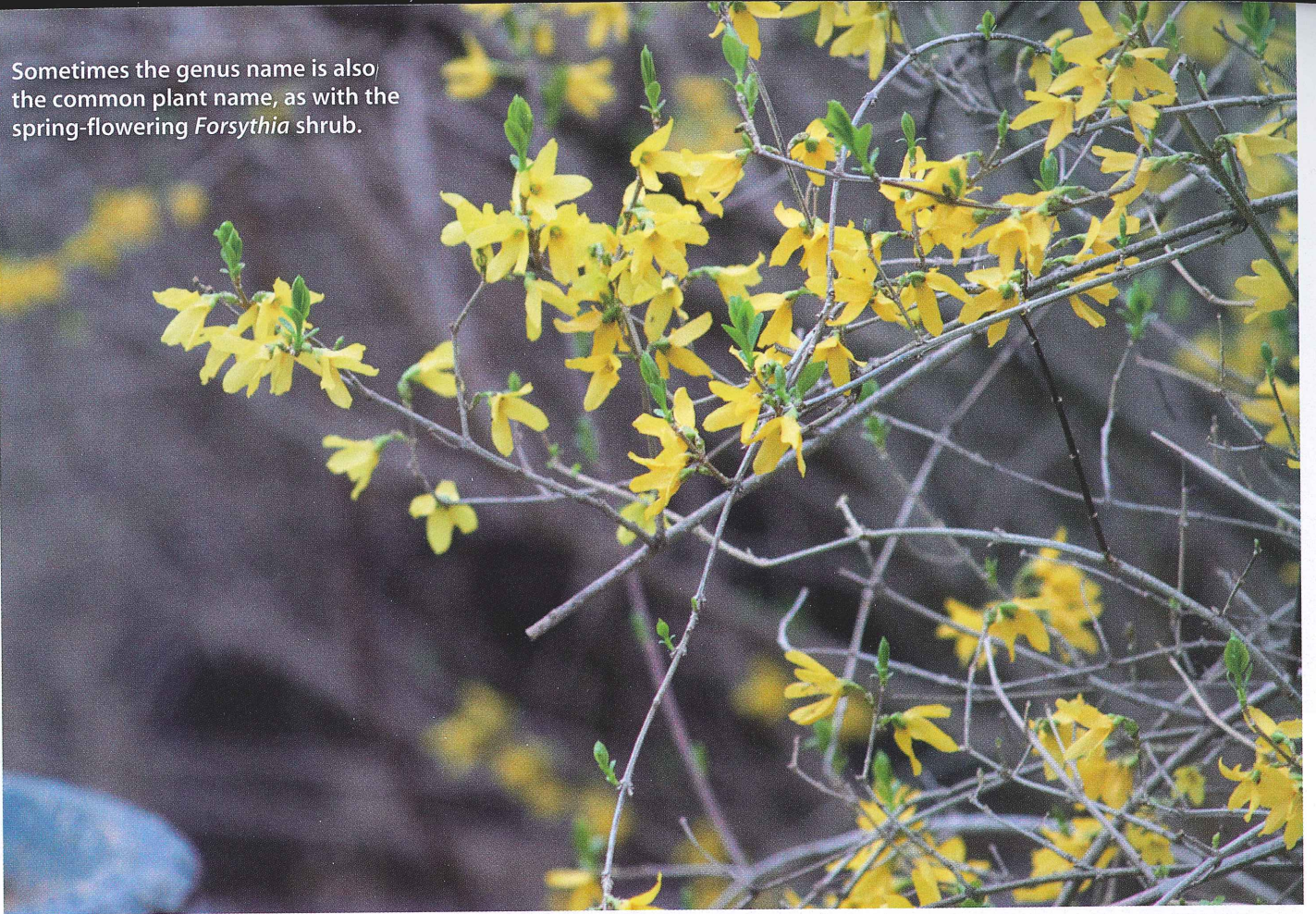
Plant Naming Conventions

In the scientific naming of plants, the genus is loosely defined as a closely related and definable group of plants comprising one or more species. The genus name is the first of the two "names," capitalized and is usually a noun. Genera of plants often are named in honor of someone.



Above: With the purple coneflower (*Echinacea purpurea*), the scientific name merely describes its attributes, coming from Greek (*echinos*) meaning "spiny" and Latin (*purpura*) meaning "purple." Top: The genus *Rudbeckia* encompasses a large number of species, but are commonly known as black-eyed Susans (*Rudbeckia hirta*).

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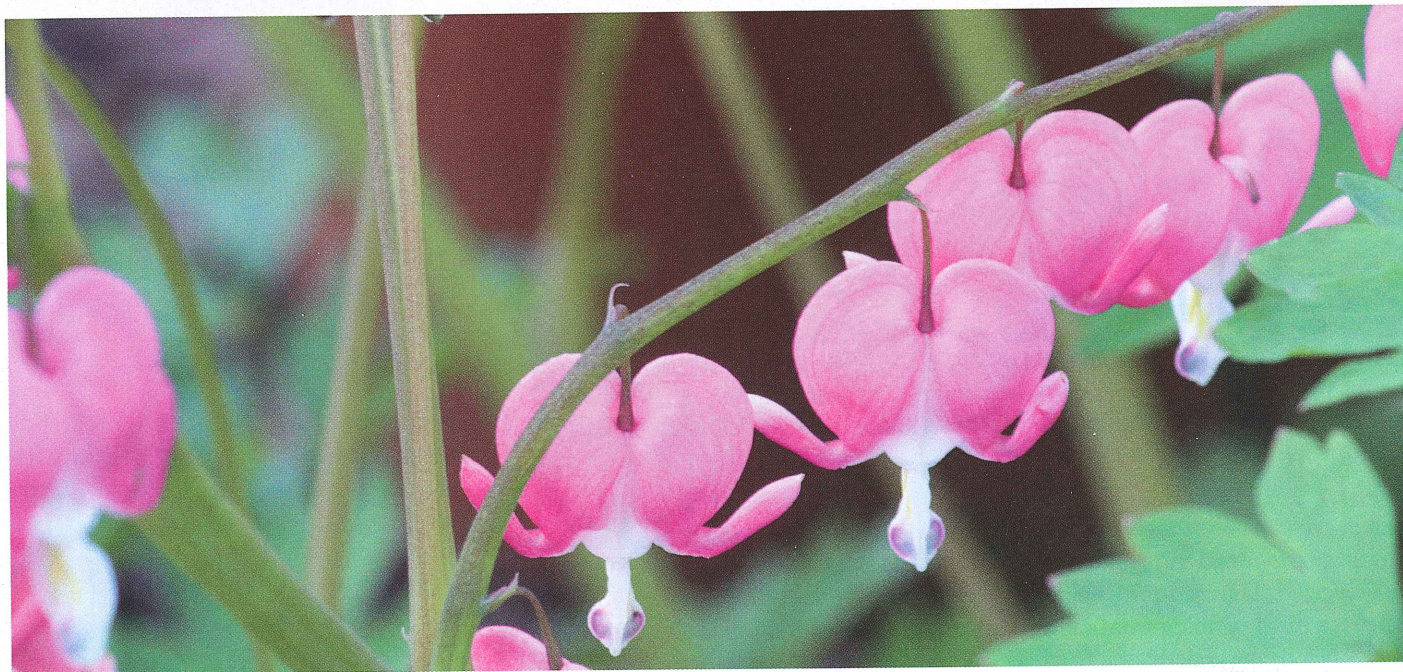
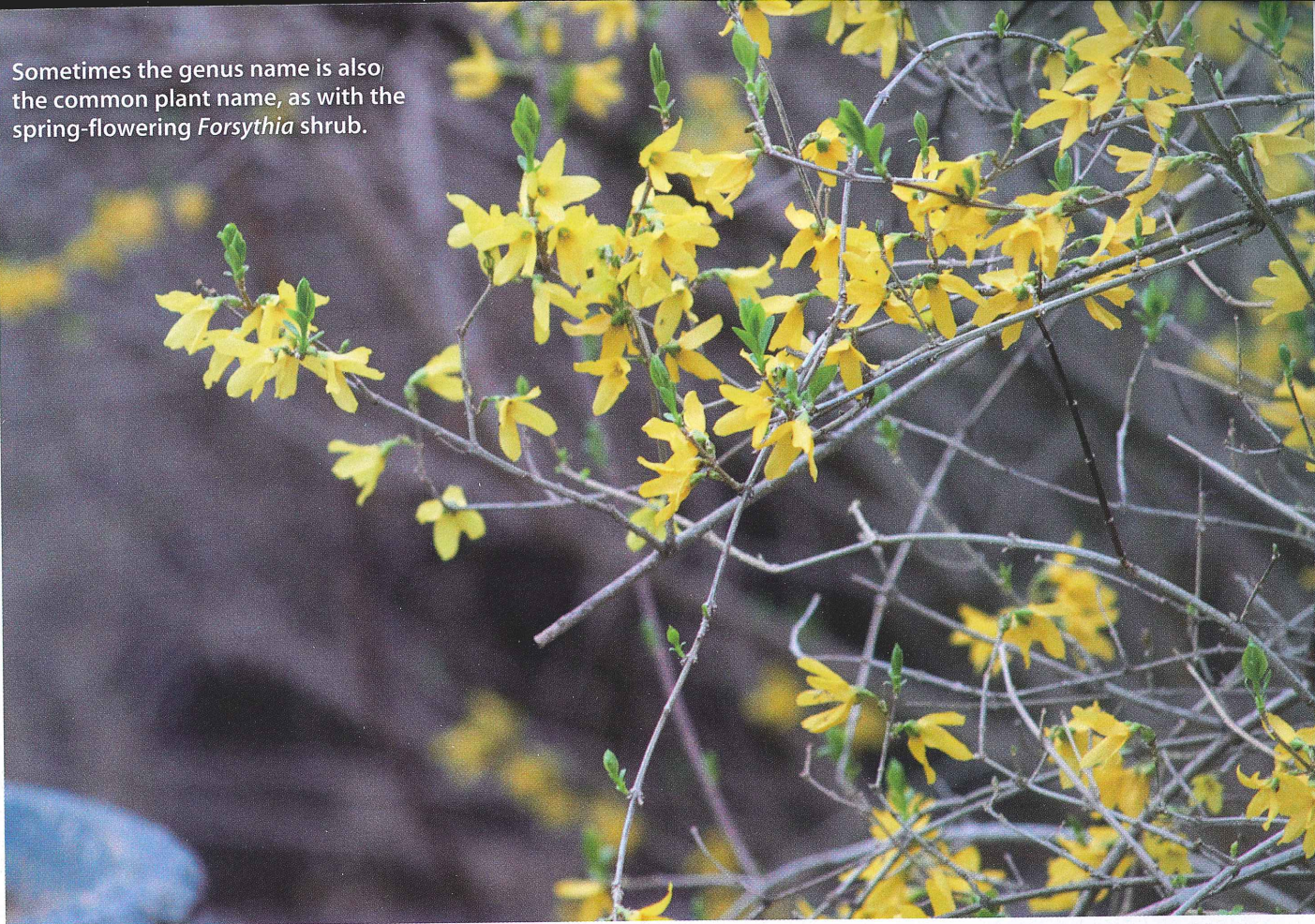
For example, the genus *Begonia* is named in honor of Michel Begon, a French naturalist. At other times, the genus name describes certain characteristics of the plant group in Greek or Latin terms. *Campanula* comes from the Latin word for bell, and is assigned to the genus to which bell flowers belong. *Gladiolus* plants (from Latin, the diminutive of *gladius*, a sword) belong to a genus of perennial bulbous

flowering plants with narrow sword-like leaves, and thus they are sometimes called “sword lilies.”

The specific epithet is the second “name” and is usually an adjective that describes in a Greek or Latin term a certain plant characteristic — how it grows (*repens*; creeping), its flower aroma (*odoratus*; fragrant), country of origin (*sinensis*; Chinese), leaf type (*palmatum*; hand-like)

Dicentra or bleeding heart (Greek *dís* “twice,” *kéntron* “spur”) is a genus of perennial plants, many with heart-shaped flowers. The genus and common name are so different — one describing the botanical structure (flower with two spurs), the common name describing its visual appearance (heart shaped).

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Although the flower is white, a break in the roots of blood-root (*Sanguinaria canadensis*) reveals a reddish sap (Latin *sanguine* means bloody).



Left: *Campanula* comes from the Latin word for bell, and is assigned to the genus to which bell flowers belong. **Right:** Some plant names are easier to remember if you know Latin root words. White in Latin is “*alba*,” so white oak is simply named *Quercus alba*.

or even color (*rubra*; red). The binomial system seemed to have worked because it mirrors the common naming of plants, just reversed. That is, in the English language the describing word (adjective) comes before the generic one (such as white oak). In Latin it is the other way around (*Quercus alba*).

Not everyone needs to become proficient in Latin (or Greek) to be a great gardener, but it makes it more fun to speak a common language, and to try to decipher what the plant might be like by its name. So, the next time you shop for plants, look at the scientific name on the tag. It is not there to frustrate you, but to allow you to

be certain that the plant you select is actually the one you wanted to buy.

Besides, the Latin names can be fun to say. Try not smiling when you say *Liquidambar styraciflua* (lih-kwid-AM-bar sty-ra-SIH-floo-ah) — the sweet gum tree. If you struggle with Latin pronunciations, don't give up; just remember the old adage — “*Quidquid latine dictum sit, altum sonatur*” — anything said in Latin, sounds profound! ♡

Douglas A. Spilker, Ph.D. (The Ohio State University), is a consulting ornamental plant pathologist, botanist, garden writer and lecturer, and is currently residing and gardening in Blue Springs, Missouri. Dr. Doug can be reached at askdrdoug@gmail.com.

Love and Honor?

Many plant names are given to honor colleagues or historical events in the plant world. In 1561, Jean Nicot had the dubious honor of being the first to present tobacco to the French royal court. The genus *Nicotiana*, which has both commercial and ornamental species, is named in his honor. The genus *Forsythia*, which is also the common name for the yellow-blooming shrub, is named after William Forsyth, a Scottish botanist and founding member of the Royal Horticultural Society. Carl Linnaeus, in gratitude to his mentor, Olaf Rudbeck, named the daisy-like flower *Rudbeckia* after him. But rumor has it that Linnaeus also had an ornery streak and took care of one of his critics, Johann Siegesbeck, by naming a non-descript weed after him (*Siegesbeckia orientalis*), which contains an herbal extract used in treating skin diseases!

Common plant names are also used as tributes. The poinsettia (*Euphorbia pulcherrima*), common at Christmas time, was named after Joel Roberts Poinsett, the first United States Minister to Mexico, who introduced the plant into the United States in 1825.

Maybe someday you will see the new plant introduction of *Spilkerus ohioensis* (spill-KER-us oh-HI-oh-ensis)!



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